Work on super vaccines

2195. SHRI SURESH PACHOURI: Will the PRIME MINISTER be pleased to state:

(a) whether a genetically engineered hapatitis B-virus vaccine has been developed abroad; if so, what are the details thereof; and

(b) whether any work in this new field has been undertaken in this country; if not, whether it is proposed to undertake any such research work in the field of super-vaccines which are under development abroad?

THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY AND THE MINISTER OF STATE IN THE DEPARTMENTS OF OCEAN DEVELOPMENT, ATOMIC ENERGY, ELECTRONICS AND SPACE (SHRI K. R. NARAYANAN): (a) Yes, Sir. A genetically engineered Hepatitis-B virus sub-unit vaccine has been developed and produced using the microorganism yeast. This vaccine called 'Hepatovax' has been approved for commercial sale in USA and some other countries. Based on results obtained so far, the genetically engineered vaccine appears comparable to the plasma derived Hepatitis-B vaccine.

(b) No, Sir. It is proposed to initiate R&D work towards producing genetically engineered Hepatitis B vaccine in Indian Laboratories such as National Institute of Virology, National Institute of Immunology and All India Institute of Medical Sciences.

Research and development work on monochlonal antibodies

2196. SHRI SURESH PACHOURI: Will the PRIME MINISTER be pleased to state:

(a) whether Government are aware that monochlonal antibodies, specific for curing heart cancer, have been developed in some countries; if so, what are the details thereof;

(b) whether any similar research and development work is under way in this country; and

(c) what is the estimated number of cancer cases in this country and in the world and what is our annunal expenditure in research and development for cancer?

THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY AND THE MINISTER OF STATE IN THE DEPARTMENTS OF OCEAN DEVELOPMENT, ATOMIC ENERGY, ELECTRONICS AND SPACE (SHRI K. R. NARAYANAN): (a) No, Sir.

(b) No, Sir.

(c) The estimated number of cancer cases in India is 1.5 million and it is estimated that 5.9 million people are affected by cancer every year throughout the world.

The Indian Council of Medical Research has an outlay of Rs. 150 lakhs for the year 1987-88 on research and development for cancer.

University Industry co-ordination in the country

2197. SHRI SURESH PACHOURI: Will the PRIME MINISTER be pleased to state:

(a) whether Government are aware that Biotechnology revolution in the West has been possible due to university-industry co-ordination; and

(b) whether a similar co-ordination between ICAR|CSIR|ICMR etc. and the industry exists in the country; if not, what are the reasons therefor and corrective steps proposed/taken ?

THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY AND THE MINISTER OF STATE IN THE DEPARTMENTS OF OCEAN DEVELOPMENT, ATOMIC ENERGY, ELECTRONICS AND SPACE